

# A FORMAL APPROACH TO INTERSUBJECTIVE RELATIONS: SHARED ENUNCIATION

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## 1. Two Strategies of an Utterance

The theoretical position that we have adopted in our thesis<sup>1</sup> has led us to introduce some new concepts like "shared enunciation," "continuous enunciation," "discontinuous enunciation" and "absolute localization" (Loc A), in the theoretical model of enunciation/predication developed by A. Culioli and his collaborators. We laid an hypothesis according to which an utterance (énoncé)<sup>2</sup> is the result of the act of enunciation. This result is obtained through two different strategies:

a) The utterance is an abstract product which results from a set of operations, executed by the speaker " $\psi_0$ " alone.<sup>3</sup>

b) The utterance is an abstract product resulting from a set of chained operations executed alternatively by one of the elements of the couple ( $\psi_0, \psi_1$ ). The concept "énoncé" in the system proposed by A. Culioli, as well as in most of theoretical systems, has been considered as a static product.<sup>4</sup> As far as we are concerned, we will develop the concept "énoncé" into two different angles:

1) The utterance (énoncé) is conceived as a static product which results from " $\psi_0$ " alone.

2) The utterance (énoncé) is conceived as a dynamical product which results from the couple ( $\psi_0, \psi_1$ ).

The above theoretical considerations at first allowed us to examine that abstract entity in its constitutive function, and, secondly, to analyze formally the intersubjective relations ( $\psi_0, \psi_1$ ) in the enunciation/assertion.

## 2. Shared Enunciation

Within the framework of the theoretical research of enunciation and predication, the transition from lexis to utterance<sup>5</sup> (énoncé) or the transition from what is unasserted but assertable to what is asserted, is a fundamental step in theoretical linguistical analysis. The set of operations which assume that charge or, more

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<sup>1</sup> 'Some reflection on the problem of localization: a formal approach'. University Paris VII, Thesis.

<sup>2</sup> It is an abstract entity and has been considered as a unit of direct observation.

<sup>3</sup> For a conventional or formal analysis, we use " $\psi_0$ " (speaker), " $\psi_1$ " (addressee) and " $\mathcal{G}_0$ " (moment of enunciation).

<sup>4</sup> Opposed to a dynamical product. This point is developed completely by us.

<sup>5</sup> A lexis is something unasserted, compared to the "content of the thought" of G. Frege (1848-1928).

technically, the taking into charge of a lexis<sup>6</sup> by a speaker ought to be explored further and be represented formally in the metalinguistical system. According to us, the formal representation and deduction rules proposed by J.P. Descles<sup>7</sup> are not sufficient enough, neither to account that charge nor to analyze formally the set of utterances analyzed in this article.

The formal description of "prise en charge" establishes a set of relations between an event and its image (*énoncé*) on one hand, the act of enunciation and the realization of that act on the other hand. Besides, it should account for a set of deduction rules which would explain how a given utterance is carried out in the enunciative space. It should also explain at what stage of the process the lexis acquires the status of utterance (*énoncé*).

Let us note here that the act of "prise en charge" (taking into charge) for certain utterances (p. 3) is much more complicated than the theoretical system A. Culioli was expected to account for. In general, the chaining of operations of the enunciative process is carried out by " $\psi_0$ ". But in some cases (see examples), the same act is carried out by the couple ( $\psi_0, \psi_1$ ). This would permit the appearance of the intervention of the addressee " $\psi_1$ " during the realization of an utterance. We will call this kind of enunciation "shared enunciation." In this, a part of the lexis has been produced by a person who plays the role of " $\psi_0$ " and the other part by another person who plays the role of " $\psi_1$ ." Both parts are constitutive of an utterance. Many questions arise in this context. Who takes charge of the lexis? How can we formally represent and give the deduction rules for the category of person and for the category of time and aspect? How to describe the enunciative apparatus, taking into account the discursive and pragmatic effects due to the change in the "prise en charge" of a lexis belonging to the same referential situation? Finally, how can we set up the coordinate systems to calculate the framed referential vaues?

### 3. The Taking into Charge by the Couple ( $\psi_0, \psi_1$ )

Let us consider the following examples where the taking into charge was assumed by the couple ( $\psi_0, \psi_1$ ). In a dialogue, two persons, A and B, intervene simultaneously to produce some statements.

Ex: A : Is Professor Caleulus staying here, please?

B : Professor Caleulus? Yes, sir. His key is not on the board, so he must be in his room.

But it happens often that the same utterance is produced exclusively either by

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<sup>6</sup> There lies a confusion on the usage of the term "prise en charge". For us, "taking into charge of a lexis" is different from "taking into charge of an utterance" not only from a technical point of view but also about the formal status of "prise en charge" (by whom? and what?).

<sup>7</sup> 'Quelques opérations énonciatives'. Modèles logiques et niveaux d'analyse linguistique, Novembre 1974, Metz.

B or by A; or by both persons A and B, or else A begins while B completes the utterance.

Ex: (1) You are not...married?

A                      B

(2) Cet article a été publié en...1968.

A                      B

In the above examples, we have noted that during the realization, a part of each utterance was produced by A ( $\psi_0$ ) who plays the role of the speaker, with regards to B ( $\psi_1$ ) who plays the role of addressee, the other part is produced by B ( $\psi_0$ ) who, from " $\psi_1$ " changes to " $\psi_0$ ," although these two part taking productions are constitutive of the same utterance. In the above examples, who has taken the charge of the lexis? We think that there is an intervention of " $\psi_1$ " (addressee) to complete the utterance produced initially by " $\psi_0$ ." Taking into account this intersubjective relation of the enunciative process, we should be able to calculate the framed referential value<sup>8</sup> associated to the category of person, to the category of aspect/time, and be able to represent formally the relations between enunciation and assertion. Further, the system of formal rules proposed by J.P. Descles is based on a hypothesis according to which the enunciation is always carried out by the speaker, but this is not true and cannot be considered as an axiomatic statement for a formal system. There exist, however, other cases where the resulting product of an enunciation that is a "énoncé" is executed by the couple ( $\psi_0, \psi_1$ ). This, in fact, indulges not a single act of assertion but two acts of assertion inside the enunciative process. It is necessary to explore further the field of assertion in order to have an appropriate and adequate formal system.

#### 4. The Transition from Unasserted Content to Asserted Content

Let us introduce here another concept: "shared assertion," which covers almost all the problems of shared enunciation and which solves the problems of transition from unasserted content to asserted content. In fact, before using the operator " $\vdash$ " (G. Frege) before any argument or any statement, we suppose the following axiom:

$$\begin{aligned} \forall x : x \in X, (X, \bar{X}) \in R \\ \vdash_x \Rightarrow (x, \bar{x}) \in \varepsilon_0 \wedge (\varepsilon_0 \in \text{Loc } A)^9 \end{aligned}$$

In order to insert the resulting product of the above axiom, in a system of referen-

<sup>8</sup> See our article "Constitutive operations between framed referential value (FRV), referential value (RV) and referent (R)".

<sup>9</sup> For a given  $x$  such that  $x$  belonging to its type  $X$  and the couple  $(X, \bar{X})$  belongs to  $R$  (referent),  $x$  is asserted, implies  $(x, \bar{x}) \in \varepsilon_0$  (the act of enunciation),  $\wedge \varepsilon_0 \in \text{Loc}$  (absolute localization).

tial coordinate system, we establish a system of "repère" so that the given  $x$  is getting connotated. Besides, let us also observe that the symbol " $\vdash$ " assertion sign of G. Frege is in fact divided in the above examples. According to him, we could say that in such examples, there is an assertable content, but according to us, that assertable content is portioned during the enunciation framed by the couple  $(\psi_0, \psi_1)$ . What has to be asserted in the beginning of enunciation is simply "a mere combination of ideas" (*blosse vorstellungenger Verbindung*). Frege has pointed out the difference between the assertable content and unassertable content, but the transition from one state to another state has been carried out through enunciation. It is quite possible that the discursive and pragmatic factors may convert the above transition into either a "partial assertion" or a "complete assertion." In the course of the production of an utterance, the speaker asserting a part of the assertable content hesitates a moment, not being able to complete his assertion, and we notice that, unexpectedly, the addressee completes the production. To make it more clear, let us note another observation made by Frege: "Now all aspects (*Erscheinung*) of ordinary language which result only from the interaction of speaker and listener, for example, when the speaker considers the listener's expectations and tries to put them in the right track even before speaking a complete sentence, have nothing corresponding to them in my formula language, because the only thing considered in a judgment is that which influences its possible consequences. Everything necessary for a correct inference is fully expressed but is not indicated, nothing being left to guessing."<sup>10</sup>

It is clear that by this remark, Frege is not interested in pragmatical problems. He has never foreseen the intervention of the listener on the charge of the assertion, therefore he does not give any importance for pragmatical factors in his formula language. For him, the "judgment" and "possible consequences" are concerned. This point of view is narrow and cannot be generalized, because we have shown that an assertion carried out by a speaker  $(\psi_0)$  alone is different from the assertion carried out by the couple  $(\psi_0, \psi_1)$ . Let us consider an assertion executed by  $\psi_0$  and another assertion executed with the intervention of  $\psi_1$ . Do both assertions have the same possible consequences and same results? Does the unexpected intervention in the charge of assertion not change the possible consequences? In other terms, as for a judgment of assertion deduced from a proposition  $P$ , let us say it has  $X$  possible consequences. As for another judgment deduced from the same proposition  $P$ , but this time with the intervention of the listener on the assertion, let us say now it has  $Y$  possible consequences. The problem is now to know whether  $X = Y$ . Most of the recent linguistical works in the field of pragmatics show clearly that this postulate is not true. However, if  $X = Y$ , then the discursive factors, the conversational factors like interception, pause, hesitation, retaking, do not have any significance in the semantic analysis of an utterance; this in fact is not true.

<sup>10</sup> See 'Connotation, notation and related articles,' Frege, ed., Bynum, 1972, Oxford Clarendon Press.

Let us consider the following examples, to uphold the hypothesis  $X \neq Y$ .

- (1) Appa innum Poka-lé  
 Father yet go (neg.)  
 'Hasn't father gone yet?'

This utterance may have two important interpretations:

(1) Appa innum Poka-lé: firstly, it is a standard question (asking for some information). Secondly, with a pause after the event "innum," this would mean (that the speaker has thought that the father "has already gone") (why he has not gone yet). Here, without being traditionally attached to a system of distributional and traditional linguistical analysis, the argumentation of the predicative relation has been carried through by the enunciation and by the conversational properties.

- (2) Tambi mani pani rentu avu tappa  
 son hour twelve be  
 'It is midnight my son.'

In some contexts, the above statement is equally interpreted as follows: "It is late, go to bed." If we want to bring a judgment of assertion and study all the possible consequences of the formula language of G. Frege, it is not possible to analyse the content of the above utterance with the help of the formula language. The pragmatic and conversational factors determine the content.

## 5. Continuous and Discontinuous Enunciation

Taking into account all these factors that we have developed so far, we will define continuous and discontinuous enunciation. We will represent formally the neighbourhood of the moment of enunciation " $\mathcal{T}_0$ " by  $V\text{---}(\mathcal{T}_0)$  and let the neighbourhood be represented by the half open, left-bound interval  $[\mathcal{T}_0'\mathcal{T}_0[$ . For the formal analysis, we will consider it as an ordered set of instant states. If the instant states of the  $[\mathcal{T}_0'\mathcal{T}_0[$  establishes a relation of identification with each other, that is, if it is possible to establish the following relations:

$$\begin{aligned} t_i \in V\text{---}(\mathcal{T}_0) &= t_{i+1} \in V\text{---}(\mathcal{T}_0) \\ t_i \in V\text{---}(\mathcal{T}_0) &= t_{i-1} \in V\text{---}(\mathcal{T}_0) \end{aligned}$$

or, more technically:

$$\forall t_i \in V\text{---}(\mathcal{T}_0) \text{ if } (t_{i+1} = t_{i+1}) \text{ or } (t_i = t_{i-1})$$

We have, in this case, a continuous enunciation. All the instant states are connex, oriented and equivalent. This of course refers to the normal process of enunciation.<sup>11</sup> On the other hand, if:

<sup>11</sup> See our article 'A formal approach to the process of production and comprehension of a discourse.'

$$\forall t_i \in V^{\neg}(\mathcal{T}_0) \text{ if } (t_i \neq t_{i \pm 1}) \text{ or } (t_i \omega t_{i \pm 1}),$$

we have in these cases a discontinuous enunciation.

More technically, in the case of discontinuous enunciation, the enunciative axe is represented as follows:

$$\sum_{i=0}^n (t_i) \in [\mathcal{T}'_0 \mathcal{T}_0] = \sum_{i=0}^n (t_i) \in [\mathcal{T}'_0 \mathcal{T}_0] \cup \sum_{i=p+1}^n (t_i) \in [\mathcal{T}'_0 \mathcal{T}_0]$$

In the examples (page 205), a part of the “instant states” of  $V - (\mathcal{T}_0)$  is assumed by A. Let  $\mathcal{P}_1 (V - (\mathcal{T}_0)) = V (\mathcal{T}_0 : = A)$ . Another part of  $V^{\neg}(\mathcal{T}_0)$  is assumed by B. Let  $(V - (\mathcal{T}_0)) = V (\mathcal{T}_0 : = B)$ . We have in this case:

$$\mathcal{P}_1 \cap \mathcal{P}_2 = \phi, \mathcal{P}_1 \cup \mathcal{P}_2 = V^{\neg}(\mathcal{T}_0)$$

More generally, let  $V^{\neg}(\mathcal{T}_0) = [\mathcal{T}'_0 \mathcal{T}_0] = \mathcal{P}_1, \mathcal{P}_2, \mathcal{P}_3, \mathcal{P}_4, \dots, \mathcal{P}_n$ .

$$\text{if } \mathcal{P}_1 \cap \mathcal{P}_2 \cap \mathcal{P}_3 \dots \cap \mathcal{P}_n = \phi \quad \text{and} \\ \mathcal{P}_1 \cup \mathcal{P}_2 \cup \mathcal{P}_3 \dots \cup \mathcal{P}_n = V^{\neg}(\mathcal{T}_0), \text{ then we have a}$$

continuous enunciation  $(\mathcal{T}_0)$ .

Otherwise, if

$$\mathcal{P}_1 \cap \mathcal{P}_2 \cap \mathcal{P}_3 \dots \cap \mathcal{P}_n \neq \phi \text{ and}$$

$$\mathcal{P}_1 \cup \mathcal{P}_2 \cup \mathcal{P}_3 \dots \cup \mathcal{P}_n = V^{\neg}(\mathcal{T}_0), \text{ then we have a continuous}$$

discontinuous enunciation  $|\varepsilon_0|$ .

## 6. Absolute Localisation (Loc A)

In the theoretical system of A. Culioli, the general formula to analyze formally an utterance is given as follows:

$$\langle \lambda \rangle \in \text{Sit}_2 \underline{\in} \text{Sit}_1 \in \text{Sit}_0 \text{---} \textcircled{1}$$

$$\langle a \text{ r } b \rangle \in \text{Sit}_2 \in \text{Sit}_1 \in \text{Sit}_0$$

$$\langle a \text{ r } b \rangle \in \text{Sit}_2 (S_2, T_2) \in \text{Sit}_1 (S_1, T_1) \in \text{Sit}_0 (\psi_0, \mathcal{T}_0)$$

where:

- $\langle \lambda \rangle$  : the lexis, the assertible content  
 $Sit_2$  : the predicative situation  
 $Sit_1$  : the assertive situation  
 $Sit_0$  : the enunciative situation

More generally, we have a parameter  $Sit_i$ ,  $i = 0, 1, 2$ . Each situation has been configured by two effective parameters of different levels ( $S_i$ ) and ( $T_i$ ),  $i = 0, 1, 2$  representing person, time and space coordinates.

Let us analyze the following utterance:

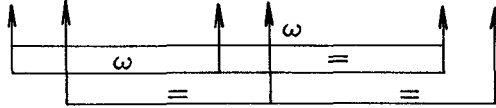
Muru pātam patikinran  
 'Muru is studying his lesson.'

In this statement, it is supposed that the subject of the enunciation and the subject of the assertion are one and the same.

$$\langle a \ r \ b \rangle \in Sit_2 \in Sit_1 \in Sit_0$$

$$\implies \langle \text{Muru, pati, pātam} \rangle \in Sit_2 \in Sit_1 \in Sit_0$$

$$\implies \langle \text{Muru, pati, pātam} \rangle \in Sit_2 (S_2, T_2) \in Sit_1 (S_1, T_1) \in Sit_0 (\psi_0, \mathcal{T}_0)$$



$$= S_2 \omega S_1 ; S_2 \omega \psi_0 ; S_1 = \psi_0 \implies \text{the resulting relation "}\omega\text{"}$$

$$T_2 = T_1 , T_2 = \mathcal{T}_0 ; T_1 = \mathcal{T}_0 \implies \text{the resulting relation "}"$$

If the enunciation and assertion are partly shared like that of the examples (n°1-2 p.), it is not possible to frame the system of calculation with the help of the general formula proposed by J.P. Descles. Particularly the system of formal rules of grammatical category, person and time/aspect, should be rearranged, in the enunciative space. It is absolutely necessary to localize the enunciative space and its coordinates with another point of reference, which takes into account the intersubjective factors in the enunciation and which could be able to control the unexpected alteration of the person, of "prise en charge" of the lexis. This, in fact, has led us to introduce a new parameter that we have named: Absolute localization (Loc A) and the entire system of calculation will be localized here afterwards with reference to this point. All the graphical and phonetical events are subsequently located with reference to that point. We have then a formula much more complicated than n° I:

$$\langle \lambda \rangle \in \underline{\text{Sit}}_2 \in \underline{\text{Sit}}_1 \in \underline{\text{Sit}}_0 \in \underline{\text{Loc}}^* A$$

$$\langle a \text{ r } b \rangle \in \underline{\text{Sit}}_2 \in \underline{\text{Sit}}_1 \in \underline{\text{Sit}}_0 \in \underline{\text{Loc}} A$$

$$\langle a \text{ r } b \rangle \in \underline{\text{Sit}}_2 (S_2, T_2) \in \underline{\text{Sit}}_1 (S_1, T_1) \in \underline{\text{Sit}}_0 (\psi_0, \mathcal{T}_0) \in \underline{\text{Loc}} A$$

In the examples quoted above (page 205) there is an intervention of the addressee " $\psi_1$ " in the realization of the events which constitute the utterance. The taking into charge is partly shared by the couple  $(\psi_0, \psi_1)$ . This being the case, how can we account for the discursive factors and how can we represent them formally in the metalinguistical system? The resulting situation is not the same when " $\psi_0$ " accounts for it with or without " $\psi_1$ ." In the process of enunciation, at a given instant state  $t_i \in V^-(\mathcal{T})$  there is an interruption (break) which produces a change of instant state. Before this interruption, the taking into charge of the process of enunciation was assumed by the speaker " $\psi_0$ " and after the transition, that is at the instant state  $t_{i+1} \in V^-(\mathcal{T})$ , it is carried out by the addressee " $\psi_1$ ." This intervention of the listener in the constitution of an utterance plays an important role in establishing the framed referential values which intervene directly in the calculations of the grammatical category, person and time/aspect. Regarding this, we will mention in this context that neither the formal rules presented by J. Rouault for the enunciative model of A. Culioli (1968-1971) nor the rules proposed by J.P. Descles (1975-1980) for the same theoretical model, are adequate enough to represent these intersubjective relations.

Framing the parameters of the enunciative situation, A. Culioli represents it:  $\text{Sit}_0 (\psi_0, \mathcal{T})$  where " $\mathcal{T}$ " represents the coordinates of space and time, " $\psi_0$ " represents the speaker. Unlike the traditional Chomskian way, where we have mainly rearrangement rules linking two levels of representation: deep structure and surface structure. We will initially constitute the deep level. A set of primitive operations are carried out to realize this construction. Among those operations, those which relate " $\psi_0$ " and  $\text{Loc } A$  are basically important in the metalinguistical construction of an utterance. Besides, we have remarked certain similarities between the operations which constitute these relations which intervene in the realization of an utterance on one hand, and the traditional usage of the terms of A. Culioli: "orientation," "positioning," "relative position of a term at surface level," on the other hand. This of course raises many questions:

- What is the referential point which organizes all the relative positions of the terms in a chain?
- How can we relate these operations with the origin?

Answering these questions we will say that with reference to the absolute localization ( $\text{Loc } A$ ), conceived by the two poles  $(\psi_0, \psi_1)$ , operations like "positioning," "orientation," are carried out in the enunciative space. In order to validate a certain property "P" at an instant state "t" of an argument "a" in a referential situation



“Sit,” a pseudo-localization has been formed and which is subsequently localized with reference to the absolute localization (Loc A). In order to formalize those relations, we develop the following hypothesis:

“At every instant  $t_i \in V^-(\mathcal{T}_0)$  of the enunciative axe,  $\mathcal{T}_0$  being a referential point, constructed on the moment of enunciation by two poles ( $\psi_0, \psi_1$ ) and considered as an accumulating point, we can associate Loc A with  $t_i \in V^-(\mathcal{T}_0)$  if and only if the couple ( $t_i \in V^-(\mathcal{T}_0)$ , Loc A) is bijective. The link between  $t_i \in V^-(\mathcal{T}_0)$  and Loc A is indispensable in the process of enunciation.” With the help of the parameter Loc A, we can define now more technically continuous and discontinuous enunciation.

$$(\psi_0, \psi_1) \in t_i^-(\mathcal{T}_i) \quad [\mathcal{T}'_0, \mathcal{T}_0] \text{ eq } (\psi_0, \psi_1) \in t_{i+1}^-(\mathcal{T}_i) \quad [\mathcal{T}'_0, \mathcal{T}_0] \Leftrightarrow \\ i=0, 1, 2 \dots n \quad i=0, 1, 2, \dots n$$

$$\text{Loc A } (\psi_0, \psi_1) \text{ of } t_i^-(\mathcal{T}_i) \quad \text{eq} \quad \text{Loc A } (\psi_0, \psi_1) \text{ of } t_{i+1}^-(\mathcal{T}_i).$$

If  $\text{Loc A } (\psi_0, \psi_1) \text{ of } t_i^-(\mathcal{T}_i) \cdot \text{eq} \text{ Loc A } (\psi_0, \psi_1) \text{ of } t_{i+1}^-(\mathcal{T}_i)$ , we have a continuous enunciation ( $\varepsilon_0$ ).

If  $\text{Loc A } (\psi_0, \psi_1) \text{ of } t_i^-(\mathcal{T}_i) \neq \bigvee \omega \text{ Loc A } (\psi_0, \psi_1) \text{ of } t_{i+1}^-(\mathcal{T}_i)$  we have a discontinuous enunciation  $|\varepsilon_0|$

Let us examine the following examples given by J. Rouault.<sup>12</sup>

- (1) Une tempête ravage la côte.
- (2) La côte est ravagée par une tempête.
- (3) La tempête ravage la côte.
- (4) La côte ravage la tempête.

Since the beginning, if we do not take into consideration the relation of “orientation,” it would be very difficult to distinguish the role played by “tempête” and “côte.” According to J. Rouault, in absence of the relation of orientation, (3) and (4) will be equivalent. Rouault has never tried to explain why and for what technical reasons these are equivalent. What are the primitive relations established by the terms “tempête” and “côte” with other terms of the chain? We will say that in the enunciative process while framing the referential values the operations carried out between  $t_i \in V^-(\mathcal{T}_0)$  Loc A for the argument “tempête” and for the argument “côte” in (3) and (4) are not identical, hence they are not equivalent.

## 7. System of Calculations with Reference to Loc A

Let us analyze the following utterance:

<sup>12</sup> ‘Formal approach to the problems related to the semantics of the natural languages,’ thesis, applied mathematics, Grenoble.

(1) Avan Rámanutaya... māmān

A                      B

(He is Raman's Uncle)

If the enunciation is not shared, the corresponding formula is:

$$\langle a \ r \ b \rangle \subseteq \text{Sit}_2 \subseteq \text{Sit}_1 \subseteq \text{Sit}_0$$

$$\langle a \ r \ b \rangle \subseteq \text{Sit}_2 (S_2, T_2) \subseteq \text{Sit}_1 (S_1, T_1) \subseteq \text{Sit}_0 (\psi_0, \mathcal{T}_0)$$

but if the enunciation is shared, and if we want to account for the pragmatic factors and intervention of  $\psi_1$  in the taking of the charge of the lexis, we propose the following formula:

$$\langle a \ r \ b \rangle \subseteq \text{Sit}_2 \subseteq \text{Sit}_1 \subseteq \text{Sit}_0 \subseteq \text{Loc A}$$

$$\langle a \ r \ b \rangle \subseteq \text{Sit}_2 (S_2, T_2) \subseteq \text{Sit}_1 (S_1, T_1) \subseteq \text{Sit}_0 (\psi_0, \mathcal{T}_0) \subseteq \text{Loc A}.$$

In the above formula, we enumerate the following relations:

$$\begin{aligned} a &\subseteq \text{Loc A} \\ r &\subseteq \text{Loc A} \\ b &\subseteq \text{Loc A} \\ \langle a - r \rangle &\subseteq \text{Loc A} \\ \langle r - b \rangle &\subseteq \text{Loc A} \\ \langle a - b \rangle &\subseteq \text{Loc A} \\ \langle a \ r \ b \rangle &\subseteq \text{Loc A} \end{aligned}$$

Taking into account the above relations, the situation of shared enunciation introduces another type of calculation putting into evidence the transition between the framed referential values and the referent. The system of rules proposed by J.P. Descles does not account for them. In order to set up a formal analysis with the act of enunciation ( $\varepsilon_0$ ), we assume that the absolute localization Loc A is fixed with the help of three parameters: subject (S), time (T), space (E).

Let:

$$a \subseteq \text{Loc A} \equiv b \subseteq \text{Loc A}$$

$$a \subseteq \text{Loc A} (S, T, E) = b \subseteq \text{Loc A} (S, T, E)$$

If it is possible to establish the following relation in the enunciative space:

$$a \subseteq \text{Loc A} (S, T, E) = b \subseteq \text{Loc A} (S, T, E)$$

we will say:  $\text{Loc A (a)} \equiv \text{Loc A (b)}$ . In this case, we add that the enunciation/assertion is not shared, at least for a and b.

But on the contrary, if we have:  $\text{Loc A (a)} \neq \text{Loc A (b)}$ , we will say that the person who has located the event "a" in the enunciation process is different from the one who has located the event "b" in the same enunciative process. In order to control the identity of the participants of the enunciative process, we have introduced the parameter Loc A.

## 8. The Role of Loc A in the Enunciative Space

To support our hypothesis, we will quote E. Benveniste<sup>13</sup>: 'l'acte individuel par lequel on utilise la langue introduit d'abord le locuteur comme paramètre dans les conditions nécessaires de l'énonciation. *Avant l'énonciation*, la langue n'est que la possibilité de la langue, *après l'énonciation*, la langue est effectuée en une instance de discours qui émane du locuteur (...) Le locuteur s'approprie l'appareil formel de la langue et il dénonce sa position de locuteur par des indices spécifiques d'une part et au moyen de procédés accessoires de l'autre.' In this quotation, we have italicized willingly some expressions to point out a notion that we have called 'operation time.'<sup>14</sup> Once the notion of "before" and "after" are introduced, what happens during the moment of enunciation? In the course of enunciation? If we want to represent formally the act of enunciation, it is necessary to explain explicitly this intermediate stage.

The problem is now to verify formally whether the conceived status before and after the enunciation is the same or not. Does each person of the act preserve the same identity throughout the act? We have shown in the beginning that it is possible to have the change of the identity. The system of rules proposed by us accounts for the change of identity and for other discursive properties like intonation, pause, retake, etc..

We will quote also another passage of Benveniste: 'La possibilité de co-référencier identiquement dans le consensus pragmatique fait de chaque locuteur un co-locuteur. La référence est partie intégrante de l'énonciation. L'acte individuel d'appropriation de la langue introduit celui qui parle dans sa parole. C'est là une donnée constitutive de l'énonciation. La présence du locuteur à son énonciation fait que chaque instance de discours constitue un *centre de référence interne*.' This remark of Benveniste led us to improve our way of considering the intersubjective problems that we have developed above. What do we mean by "centre de référence interne"? How can we demonstrate its presence in the production of an utterance? Where can we insert the traces of the "centre de référence interne" in the metalinguistical representation? We will say that it is about the link between  $t_i \in V\text{---}(\mathcal{J}_0)$  and Loc A which constitutes the internal reference of an event which is itself inserted in

<sup>13</sup> 'Problèmes de linguistique générale' Tome II-L'appareil formel de l'énonciation, E. Benveniste, ed. Gallimard.

<sup>14</sup> 'The operation time is the limit taken to complete the act of enunciation ( $\epsilon_0$ ) It is related to 'temps impliqué,' de G. Guillaume.

a statement.

Analyzing the functional side of the parameter Loc A, we will say that Loc A plays an important function: organizee of the enunciation. We mean to say that in the enunciative space, two persons at an instant state assume the function of speaker and addressee, i.e.,  $t_i \in V - (\mathcal{S}_0)$ . This identity assigned at  $t_i \in V - (\mathcal{S}_0)$  will be the same everywhere in the interval  $[\mathcal{S}'_0, \mathcal{S}_0]$ . Loc A, first of all, verifies this case. Secondly, it verifies also whether the referential values assigned before enunciation is the same after the enunciation. Finally, it describes how the realization of an utterance is carried out in the enunciative space.

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